# OVERWEIGHT IN SOUTH CAROLINA *Children*

## The Problem

- Approximately 1 out 8 high school students in South Carolina is overweight.[1]*
- Over 25% of low-income children ages 2-5 in South Carolina are overweight or at risk of overweight.[2]
- Nationally, overweight rates in children ages 6-11 have tripled since the late 1970s, while rates for adolescents ages 12-19 have more than doubled in the same time period.[3]
- Overweight adolescents have a 70% chance of becoming overweight or obese adults.[4]
- Overweight children are at increased risk for high blood pressure, asthma, sleep apnea, diabetes, and decreased well-being.[4]
- If current trends continue, 1 out of every 3 children born in 2000 will be diagnosed with type 2 diabetes, primarily due to a poor diet and lack of physical activity.[5]

** Due to a lack of data, no reliable information is available for SC children in grades K-8*

## Risk Factors

- Less than 20% of adolescents in South Carolina eat the recommended 5-9 servings of fruits and vegetables per day.[1]
- Nearly 50% of adolescents in South Carolina do not meet the minimum recommendations for adequate physical activity.[1]
- In the US, children watch TV an average of 1,023 per year (compared to 900 hours per year spent in school).[9]
- Nationally, sweetened beverage consumption has doubled among youth in the last 30 years.[6]
- By the time children are 14 years or older, 32% of young women and 52% of young men are consuming 3 or more sugared soft drinks daily.[7]
- South Carolina mothers rank 43rd out of all states in breastfeeding rates (breastfeeding has been shown to reduce the risk of overweight in children).[8]

*"We must…intensify efforts for early identification and prevention of overweight, or we are going to have the first generation of children who are not going to live as long as their parents."*

*Dr. George Blackburn*
*Harvard Medical School*

## Keys to Healthy Kids at a Healthy Weight


Get at least 60 minutes of moderate to vigorous exercise every day.


Eat at least 5 servings of fruits and vegetables every day.


Drink 1% or less milk.


New moms should breastfeed for at least 6 months.


Limit foods and beverages with added sugars (soft drinks, soda, candy).


Support school and local efforts to adopt policies supportive of good nutrition and active living.

*Please see other side for information about healthy weight.*

# OVERWEIGHT IN SOUTH CAROLINA

# Children

## *Weight in Children*

The term obesity is not used when describing children and youth. Instead, children and youth are said to be "at risk of overweight" or "overweight." This terminology is used because children and youth are growing and their weight may significantly change during the growth period. Because ideal weight for children and youth is dependent on age and gender (as well as height), adult BMI charts are not appropriate for children. BMI-for-age growth charts are used to determine a child's BMI percentile as compared to other children of the same age and gender. Categories of BMI for children and youth under 20 years of age are divided into the following percentiles:

| Category | Percentile |
|---|---|
| Underweight | Less than 5th |
| Normal | 5th to 84th |
| At risk of overweight | 85th to 94th |
| Overweight | 95th and higher |

For example, a 10-year old boy with a BMI-for-age at the 90th percentile means that 90% of males of the same age and height have a lower BMI. This child would be considered overweight.

*More information on the 2002 CDC Growth Charts can be found at http://www.cdc.gov/growthcharts*


1. *Youth Risk Behavior Surveillance Survey (YRBSS), 1999*
2. *Pediatric Nutrition Surveillance System (PedNSS), 2003*
3. *Centers for Disease Control, National Center for Health Statistics. (2000). NHANES IV short report*
4. *U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. (Rockville, MD): U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; (2001).*
5. *Vehkat Narayan, K. The Journal of the American Medical Association, Oct. 8, 2003; vol 290: pp 1884-1890.*
6. *Gleason P and Suitor C. Children's diets in the mid-1990s: dietary intake and its relationship with school meal participation. USDA Report No.:CN-01-CD1, (2001).*
7. *Nielson S and Popkin B. Changes in beverage intake between 1977 and 2001. American Journal of Preventive Medicine 2004:27 (3):205-210.*
8. *National Immunization Survey, National Center for Health Statistics (NCHS), 2003. (Measure taken at 6 months after delivery). Obesity Research 12(1): 18-24 (January 2004).*
9. *Nielson Media Research, 2000*



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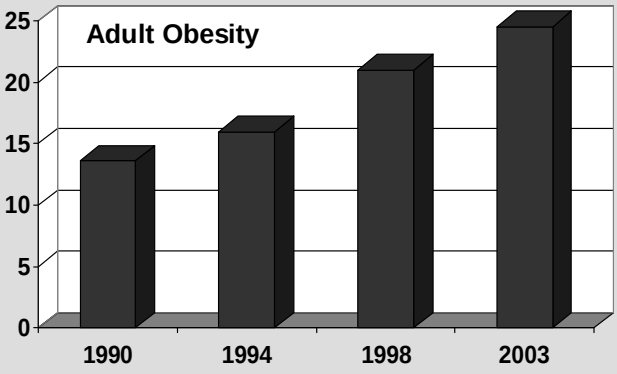
# OVERWEIGHT
## IN SOUTH CAROLINA

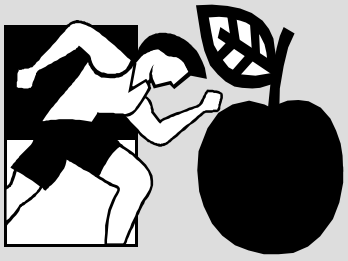
*Obesity in SC*

## The Problem

- Obesity rates in South Carolina have nearly doubled since 1990. (1)
- In 2003, South Carolina had the 13th worst obesity rate in the nation.
- 61% of adults in South Carolina are either overweight or obese. (1)
- 25%of adults in South Carolina are obese. (1)
- Obesity-related medical costs in South Carolina topped $1 billion in 2003. This translates to a cost of $256 per South Carolinian. (2)
- Of the $1 billion dollars spent on obesity-related medical costs in SC, over half of these costs were through Medicaid/Medicare. (2)
- Although obesity affects all populations, rates of obesity are higher among minorities and the underserved.
- South Carolina has one of the highest rates of obesity-related chronic disease such as heart disease, stroke, and diabetes in the nation.




*** Obesity in SC has nearly doubled since 1990.**



## Factors Leading to Obesity

- Over half of South Carolinians are either totally inactive or do not get the recommended amount of physical activity. (1)
- Over 75% of South Carolinians do not consume the recommended number of fruits and vegetables per day. (1)
- South Carolina mothers rank 43rd out of all states in breastfeeding rates (breastfeeding has been shown to reduce the risk of obesity in children). (4)

| Diseases Related to Obesity | |
|---|---|
| Heart Disease | Diabetes |
| High Blood Pressure | Sleep Apnea |
| High Cholesterol | Depression |
| Some Cancers | Osteoarthritis |
| Gall Bladder Disease | Asthma |

## What Can You Do?

- Become an advocate for policies supportive of active living, such as Safe Routes to School and Smart Growth initiatives.
- Be active for at least 30 minutes on most days of the week.
- Support policies and programs designed to increase access to healthy foods such as Farmer's Markets and adopting standards for all foods served in schools.
- Eat at least 5 servings of fruits and vegetables a day.
- Reduce portion sizes.
- Limit TV time to less than 2 hours a day.
- New mothers should breastfeed for at least six months.

*Please see other side for information about healthy weight.*

# OVERWEIGHT
## IN SOUTH CAROLINA

*Obesity in SC*

### *What's the difference between overweight and obesity?*

A BMI between 18.5 and 24.9 is considered normal weight for adults. A BMI from 25 and 29.9 is considered overweight, and a BMI of 30 or higher is considered obese. Obesity is further classified based on severity: BMI of 30 - 34.9 is Class 1, BMI of 35 – 39.9 is Class II Obesity, and Class III Obesity is a BMI over 40. Research has shown that as BMI rises into the more severe ranges (Class II and Class III), the risk for morbidity and mortality also increase.

### *BMI*

The commonly accepted measure of being overweight and obesity in adults is the Body Mass Index, or BMI. In adults, the BMI measurement is determined by body weight relative to height. BMI is best used as a screening tool and not a diagnostic tool. Additionally, BMI is only one piece of a person's health profile, and other measures and risk factors (e.g., waist circumference, smoking, physical activity level, diet) should also be addressed.

Body Mass Index or BMI is a tool for indicating weight status in adults. It is a measure of weight for height. For adults *over 20 years old*, BMI falls into one of these categories:

| BMI | Weight Status |
|---|---|
| Below 18.5 | Underweight |
| 18.5 – 24.9 | Normal |
| 25.0 – 29.9 | Overweight |
| 30.0 & above | Obese |

Body Mass Index can be calculated using pounds and inches with this equation

$$\text{BMI} = \left( \frac{\text{Weight in Pounds}}{(\text{Height in inches}) \times (\text{Height in inches})} \times 703 \right)$$

For example, a person who weighs 220 pounds and is 6 feet 3 inches tall has a BMI of 27.5.

$$\left( \frac{220 \text{ lbs.}}{(75 \text{ inches}) \times (75 \text{ inches})} \times 703 \right) = 27.5$$


1. *Behavioral Risk Factor Surveillance Survey (BRFSS), 2003.*
2. *Eric A. Finkelstein, Ian C. Feibelkorn, and Guijing Wang. State-level estimates of annual medical expenditures attributable to obesity, Obesity Research 12(1): 18-24 (January 2004).*
3. *National Vital Statistics Repot (NVSR), 2001.*
4. *National Immuniazation Survey, National Center for Health Statistics (NCHS), 2003. (Measure taken at 6 months after delivery). Obesity Research 12(1): 18-24 (January 2004).*



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